

S L O A N

FLUSH VALVES

CATALOG 39

SLOAN VALVE COMPANY
CHICAGO, ILL., U.S.A.

THE ROYAL FLUSH VALVE



The *improved* ROYAL Flush Valve is the outstanding diaphragm flush valve, as it includes every feature that has made ROYAL Valves famous for a third of a century, plus the added simplicity of Segment Diaphragms.

The *improved* ROYAL is operated by a slight movement of the handle in any direction, which causes a complete flush and refill to suit any fixture, regardless of whether the handle is held or released.

The *improved* ROYAL has a large, free waterway and operates efficiently at all pressures between 5 and 100 pounds on plumbing fixtures of any manufacture. However, wall hung and blow-out closets usually require 10 to 15 lbs. or more. (See Flush Valve Piping Data.)

The *improved* ROYAL has a metal segment diaphragm which automatically compensates for wear due to hard use or abuse.

The *improved* ROYAL by-pass is of Monel Metal and is built into the Segment Diaphragm, eliminating dowel pins, by-pass tube and by-pass channel in the cover of the valve.

The *improved* ROYAL is furnished with or without vacuum breaker, as ordered. (Shown above with vacuum breaker.)

ROYAL Quiet-Flush VALVE

Quiet-Flush Equipment, the Sloan silencing unit that eliminates flush valve noises completely, is furnished with ROYAL Flush Valves,

at slight additional cost, when so ordered. Quiet-Flush Equipment may also be applied simply and easily to ROYAL Flush Valves already installed.

THE STAR FLUSH VALVE



The STAR is the world's largest selling flush valve and is the outstanding piston type valve for buildings. It has exactly the same interior construction as the NAVAL for ships, which handles the sand and silt of rivers and harbors.

The STAR has a handy screw that easily adjusts the flush to suit the fixture without shutting off the water or disturbing the by-pass. This adjustment controls the main opening through the flush valve and will stay put—whereas a by-pass is difficult to adjust and will not stay put.

The STAR has the exclusive Sloan Xpelor, which prevents clogging, as it expels anything in the by-pass just before the start of each flush. These, and other vital parts, are of Monel Metal, which resists wear and corrosion.

The STAR has the exclusive Sloan valve seat, which is renewable without special tools or grinding.

The STAR has a stable piston which insures dependable operation and the exclusive Sloan anti-friction double cups which prevent scored cylinders and by-passing.

The STAR is furnished with or without vacuum breaker, as ordered. (Shown above with vacuum breaker.)

STAR Quiet-Flush VALVE

Quiet-Flush Equipment, the Sloan silencing unit that eliminates flush valve noises completely, is furnished with STAR Flush Valves, at slight

additional cost, when so ordered. Quiet-Flush Equipment may also be applied simply and easily to STAR Flush Valves already installed.

CROWN AND NAVAL FLUSH VALVES



The CROWN is an outstanding flush valve for buildings of every type, as it is exactly the same in construction as the STAR, the world's largest selling flush valve, except that it has a cast, one-piece cover and a different appearance.

The CROWN has handy screw driver adjustment of the flush to suit the fixture without shutting off the water or disturbing the by-pass. It has the exclusive Sloan Xpelor and vital parts of Monel Metal.

The CROWN has the exclusive Sloan valve seat, which is renewable without special tools or grinding. It has a stable piston and the exclusive Sloan anti-friction double cups.



The NAVAL is a flush valve of supreme quality that meets the acid test of sea duty or severe water conditions anywhere, as it handles the bad water in rivers, harbors and the ocean, and withstands the action of corrosive water.

The NAVAL is exactly the same as the STAR and CROWN except that the NAVAL is cast from special salt-water alloys and contains more Monel Metal parts. Combining all the features of the STAR and CROWN plus corrosion resisting ability, it represents the highest quality available today.

The CROWN and NAVAL are furnished with or without vacuum breaker. (Shown above with vacuum breaker.)

CROWN and NAVAL Quiet-Flush VALVES

Quiet-Flush Equipment, the Sloan silencing unit that eliminates flush valve noises completely, is furnished with CROWN and NAVAL Flush Valves, at slight additional cost, when so ordered. Quiet-Flush Equipment may also be applied simply and easily to CROWN and NAVAL Flush Valves already installed.

SEAT-OPERATED FLUSH VALVES



Sloan Seat-Operated Royal, Star or Crown Flush Valves give unfailing assurance of flushed fixtures in public washrooms.

In elementary schools, comfort stations, public washrooms, or wherever there is a possibility of fixtures being left unflushed, Sloan Seat-Operated Flush Valves provide a positive means of maintaining cleanliness. The seat-operating mechanism used with Sloan Valves is rugged and durable and has stood the test of a score of years in thousands of installations throughout the world. The widespread use of this type of equipment today is the result of the record of dependability established by Sloan.

Sloan Seat-Operated Flush Valves are furnished either exposed or concealed for top or back spud bowls and are regularly supplied with ebony composition open front and back seats. At a slight additional cost they may be had with Quiet-Flush Equipment, the Sloan silencing unit that eliminates flush valve noises completely.

Sloan Seat-Operated Flush Valves are furnished with or without vacuum breaker, as ordered. (Those illustrated are with vacuum breaker.)



Star Seat-Operated
Flush Valve



Royal Seat-Operated
Flush Valve



Crown Seat-Operated
Flush Valve

SLOAN FLOOR VALVES



Sloan Floor Valves have a Solid Nickel Silver floor plate and push button. These are highly polished, extra heavy castings that will withstand wear and abuse. Floor plates are set flush with the floor and have $\frac{1}{4}$ in. adjustment to accommodate variations. They are circular, but will be furnished square when so ordered.

1 $\frac{1}{4}$ IN. AND 1 IN. SLOAN FLOOR VALVES

The 1 $\frac{1}{4}$ in. and 1 in. Sloan Floor Valves have a handy screw that easily adjusts the flush to suit the fixture without shutting off the water. This adjustment controls the main opening through the flush valve and will stay put. These valves have the exclusive Sloan Xpelor, which prevents clogging, as it expels anything in the by-pass just before the start of each flush. These and other vital parts are of Monel Metal, which resists

wear and corrosion.

The 1 $\frac{1}{4}$ in. Floor Valve is for fixtures that require a large flush, such as water closets.

The 1 in. Floor Valve is for fixtures that require a medium flush, such as urinals.

The working parts of all Sloan Floor Valves are easily removed for inspection. Each valve is furnished with a construction floor plate to protect the valve during building operations.

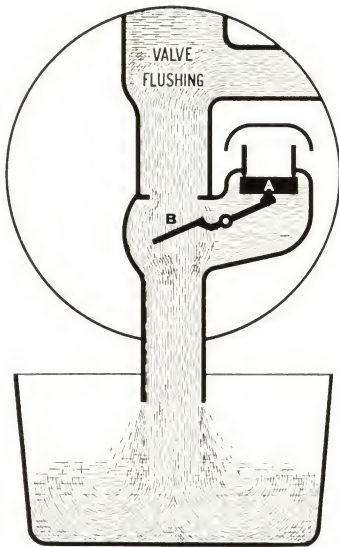
 $\frac{1}{2}$ IN. SLOAN FLOOR VALVE

The $\frac{1}{2}$ in. Floor Valve, for lavatories supplied with tempered water through a goose-neck spray, saves water and time, improves sanitary conditions and eliminates faucets and waste plugs.

The $\frac{1}{2}$ in. Floor Valve for showers, supplied with tempered water, saves water and time, eliminates individual mixing valves and danger of extreme temperatures.



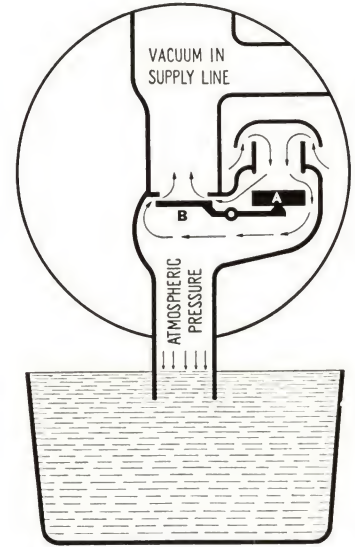
SLOAN VACUUM BREAKER



← During Flush
Air Valve "A" closed by flow of water on Disc "B".

At All Other Times →
Air Valve "A" open to atmosphere with full 1-inch area which breaks vacuum and prevents water from rising in flush pipe.

Heavy disc "A" and light disc "B" are on opposite ends of a lever pivoted on a Monel Metal bearing. Thus Air Valve "A" is always open to the atmosphere, except when closed by a flow of water on Disc "B".



The SLOAN Vacuum Breaker has a full 1-inch opening from the atmosphere into the flush connection to the fixture and, although a large volume of air is admitted, the operation is quiet and free from air noises. The opening to the atmosphere is well protected and could not easily be stopped up, even with malicious intent.

The SLOAN Vacuum Breaker cannot corrode or stick, as it has a Monel Metal bearing and parts of Composition M, an alloy used by the

U. S. Navy to withstand the action of salt water. The waterway through the vacuum breaker is much larger than through any flush valve; consequently there is no restriction of the flow to the fixture, even though the pressure be low.

The SLOAN Vacuum Breaker is guaranteed to make ANY flush valve on ANY closet bowl syphon proof, when properly installed above the spill line of the fixture.

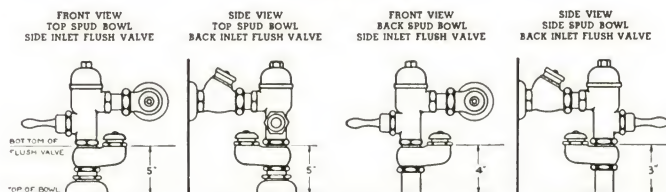
The SLOAN Vacuum Breaker is approved for use in every locality in the United States where a preventive of back-syphonage is required. It can be furnished with all SLOAN Flush Valves as illustrated herewith and on the preceding pages. The SLOAN Vacuum Breaker is easily applied



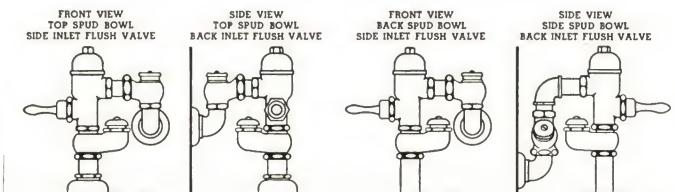
The Sloan V-60-A Vacuum Breaker eliminates all possibility of back-syphonage.

to old installations as well as new, and may be used with any make of flush valve. It is regularly furnished with union coupling suitable for most of the flush valves on the market, but will be furnished with special coupling for any valve at no extra charge, on receipt of sample coupling.

Minimum Requirements for the Installation of V-60-A SLOAN Vacuum Breakers on New or Old Flush Valves



Suggested Manner of Raising Old Flush Valves to Install V-60-A Vacuum Breaker



FLUSH VALVE PIPING DATA

On large, complicated installations the Engineering Department of the SLOAN VALVE COMPANY is always accessible, through the local representative, for consultation and recommendations.

For the average installation pipe sizes may be calculated from the tables and data which follow. To illustrate the method of procedure, the following typical example is calculated from the diagram and tables, using the arbitrary assumptions given below:

(1) The building is an apartment house in which the highest valve is 28 feet above the street water main.

(2) The water pressure in the street main is a minimum of 50 lbs. per square inch.

(3) The size of the tap on the water main is 1 inch.

(4) Neither water meter nor water filter are connected in the water supply line.

NOTE: Both meters and filters reduce the water pressure.

See data which follows adjacent to Table 6.

(5) The water closets are syphon jet type requiring a minimum of 5 lbs. water pressure at the flush valve. (See Table 3.)

On the diagram below the water supply system is divided into four sections—A, B, C, and D. It will be noted that there are a total of ten flush valves installed. Section A piping must be of sufficient size to provide water pressure for all 10 valves; Section B, 8 valves; Section C, 3 valves; and Section D, 2 valves.

To determine the pipe sizes for Section A, B, C, and D, the essential data should be assembled on a form similar to the one illustrated on the opposite page. For Section A follow this procedure:

(a) There are a total of 10 flush valves served by Section A. Enter this in Column 2.

(b) Referring to Table 1, Column 1 (Apartment Buildings), 10 valves require 60 gallons of water per minute. On account of the laundry supply taken from this section, we arbitrarily increase the requirement to 70 gallons and enter this in Column 3.

(c) In Column 4 we arbitrarily enter 1½ in. as a trial size of pipe until this is finally proven correct, or must be increased or decreased to balance the line.

(d) A 1½ in. pipe carrying 70 gallons of water per minute causes a pressure drop of 20 lbs. per square inch per 100 ft. (See Table 4). Enter this in Column 5.

(e) From the diagram the length of Section A from the street main to the point where the first 2 valves are taken off is 58 ft. To compensate for the resistance of fittings (see table 2), this is increased to 65 feet and entered in Column 6.

(f) From the data entered, the pressure drop can now be calculated and entered in Column 7, as follows:

65 ft. of 1½ in. pipe at 20 lbs. drop per 100 ft. is 13 lbs. per sq. in. (.65x20=13).

(g) The pressure drop for Sections B, C, and D are calculated in the same manner as in (a) to (f) for Section A.

To complete the data, the following must now be inserted at the top of Column 7 of the Calculations Form:

(h) Insert the tap pressure loss at the top of Column 7. The tap size is 1 in. By referring to Table 5, it will be found that the loss of pressure for a flow of 70 gallons per minute is 8.8 lbs. per sq. in. (See Section A data, Column 3.)

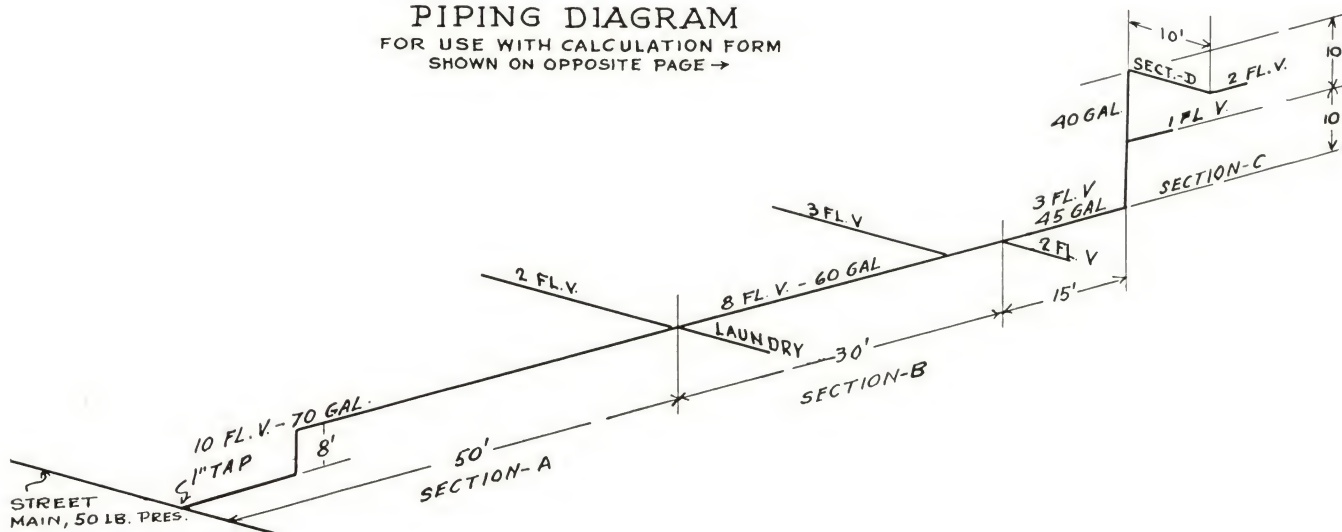
(i) The required pressure at the flush valve while flushing for a syphon jet closet is 5 lbs. per sq. in. (See Table 3.)

(j) The elevation of the highest flush valve above the level of the street main is 28 feet (see Piping Plan). This entails a static loss of 12.1 lbs. per sq. in. (The static loss per foot of elevation equals .433 lbs. per sq. in. regardless of the size of the pipe.)

(k) The total of all the items in Column 7 is 49.9 lbs. per sq. in. The minimum pressure available in the street main is 50 lbs. per sq. in., and since this is not exceeded the piping sizes calculated are adequate.

The solution given on the Form was obtained upon the second trial. At the first trial Section C was made 1¼ in. This arrangement made the total required pressure in excess of the available pressure of 50 lbs. It should be stated here that the close correspondence found above is somewhat unusual and not at all necessary. On the other hand, while adequate sizes are essential, it is not necessary or advisable to install piping much larger than is actually required.

PIPING DIAGRAM
FOR USE WITH CALCULATION FORM
SHOWN ON OPPOSITE PAGE →



FLUSH VALVE PIPING DATA

FORM FOR CALCULATING SIZES

All Items Exclusive of Piping						Column 7
Tap	Size	1 inch	Loss			8.8
Water Meter	Type	No Meter	Loss			
Filter		No Filter	Loss			
Closet Bowl	Type	Syphon Jet	Required Pressure at Flush Valve while flushing			5.
Elevation of highest Flush Valve above Street Main 28 ft. at .433 lb. Loss						12.1
Piping						
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	
Section of Piping	Number of Flush Valves Supplied by Section	Gallons per Minute Delivered by Section	Size of Pipe and Fittings in Section	Friction Loss per 100 ft. in Section	Length in Feet of Pipe and Fittings in Section	
A	10	70	1½	20.	65	13.0
B	8	60	1½	14.	35	4.9
C	3	45	1½	8.26	30	2.5
D	2	40	1¼	14.2	25	3.6

Loss of Pressure due to Pipe, Fittings and Other Items in lb. per sq. in.

Total Required Pressure at Main found by adding all Items in Column 7..... 49.9
 Minimum Available Pressure at Main—50.0 lb. per square inch.

TABLE NO. 1—REQUIRED RATE OF FLOW IN GAL. PER MIN. FOR FLUSH VALVES

Total Number of Valves on Line	Apartment Buildings	Hotels—Guest Rooms with Tubs	Office Buildings	Hotels—Guest Rooms with Shower Bath	Residences	City Halls	County and State Buildings	Industrial Plants	Clubs, Y.M.C.A.'s	Hotels—Public Rooms	Hospitals	Restaurants	Gymnasiums	University Buildings	Railroad Stations	Public Baths	Public Comfort Stations	Stadiums, Ball Parks	Theatres, Dance Halls	Public Schools	Hand Operated Flush Valves	Seat Operated Flush Valves
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	35	35	40	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
2	40	40	45	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
3	45	45	50	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
4	45	45	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
5	50	50	55	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
6	50	50	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
7	50	50	60	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
8	60	60	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
9	60	60	70	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
10	60	60	70	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
11	70	70	80	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
12	70	70	80	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
14	70	70	90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	70	70	90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	70	70	90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
20	80	80	100	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
22	80	80	100	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
24	80	80	100	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

TABLE NO. 2—FITTINGS AND VALVES—EQUIVALENT LENGTH OR FEET OF PIPE GIVING SAME LOSS IN FRICTION

PART	90 Deg. Elbow	45 Deg. Elbow	Tee-Side Outlet	Gate Valve
Size of Pipe	Equivalent Length in Feet of Pipe			
1"	3	1.5	6	1.5
1¼"	3	1.5	6	1.5
1½"	3.5	1.8	7	1.8
2"	5	2.5	10	2.5
2½"	6	3.	12	3.
3"	7	3.5	14	3.5
3½"	8	4.	16	4.
4"	10	5.	20	5.

TABLE NO. 3—REQUIRED PRESSURE AT FLUSH VALVE

Type of Closet Bowl	Required Pressure at Inlet to Flush Valve while Flushing
Washdown Syphon Jet Reverse Trap Reverse Trap with Jet Blowout Duo-Jet	Floor Outlet Bowls
	5 lb. sq. in.
	5 lb. sq. in.
	5 lb. sq. in.
	5 lb. sq. in.
	10 lb. sq. in.
	10 lb. sq. in.
Syphon Jet Blowout	Wall-Hung Bowls
	15 lb. sq. in.
	20 lb. sq. in.

FLUSH VALVE PIPING DATA

TABLE NO. 4—PRESSURE LOSS OF WATER IN POUNDS PER SQUARE INCH
PER 100 FEET OF CLEAN IRON PIPE

Gal. per min.	Size of Pipe								
	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
10	13.0	3.16	1.10	0.47	0.12	0.04			
20	50.4	12.3	3.75	1.66	0.42	0.14	0.06		
30	110.	27.5	7.70	3.75	0.91	0.30	0.13	0.06	
35		37.8	11.0	5.14	1.26	0.42	0.18	0.09	
40		48.0	14.2	6.52	1.60	0.53	0.23	0.11	0.06
45		61.5	18.1	8.26	2.02	0.67	0.29	0.14	0.08
50		75.0	22.0	10.0	2.44	0.81	0.35	0.17	0.09
55		92.5	26.7	12.0	2.97	0.99	0.43	0.21	0.11
60		110.	31.3	14.0	3.50	1.17	0.50	0.24	0.13
70			42.3	20.0	4.80	1.50	0.68	0.38	0.19
80			55.0	25.0	6.30	2.00	0.88	0.41	0.23
90			69.4	31.5	7.85	2.59	1.06	0.52	0.28
100			85.0	39.0	9.46	3.20	1.31	0.64	0.33
120				56.0	13.8	4.55	1.85	0.90	0.46
140				80.0	18.7	6.16	2.51	1.19	0.61
150				88.0	21.1	7.03	2.86	1.36	0.70
160				100.	24.0	7.98	3.25	1.54	0.79
180					30.0	10.1	4.08	1.93	0.99
200					37.5	12.5	5.02	2.38	1.22
225					47.5	16.1	6.39	3.04	1.55
250					58.5	19.7	7.76	3.70	1.89
275					71.0	23.9	9.48	4.37	2.27
300					85.1	28.1	11.2	5.04	2.66

TABLE NO. 6—LOSS OF PRESSURE THROUGH VARIOUS SIZE
METERS LB. PER SQUARE INCH

Gals. per min.	Size of Meter									
	1"		1 1/2"		2"		3"		4"	
	Low	High	Low	High	Low	High	Low	High	Low	High
30	4.4	7.0								
40	7.8	13.0								
50	13.0	20.0	1.1	7.6	.53	4.0				
60	18.0	29.0	1.5	11.0	.76	6.0				
70	24.0		2.1	15.0	1.1	8.0				
80			2.8	22.0	1.4	13.2	.5	2.0		
90			3.5	25.0	1.75	13.2	.63	2.4		
100			4.25		2.2	16.5	.7	3.0	.25	.7
120			6.1		3.2	24.0	.9	4.25		
140			8.4		4.3		1.4	6.0		
150			9.6		5.0		1.5	6.5	.6	2.5
160			11.0		6.0		1.7	7.25		
180			14.0		7.2		2.2	9.25		
200			17.0		9.0		2.75	11.75	1.1	4.4
225					11.2		3.5	15.0		
250					14.0		4.3	18.4	1.6	6.7
275					17.0		5.2	22.0		
300					20.0		6.2	26.5	2.4	10.0

This table gives losses of pressure for the lowest resisting meter and for the highest resisting meter of each size for which figures are at hand.

Tables of resistances for any particular meter can usually be obtained from the manufacturers.

The pressure drop through a meter should never exceed 20 lbs. and it is advisable to keep it well below this amount.

TABLE NO. 5—OUTLETS FROM MAIN—LOSS OF
PRESSURE THROUGH TAPS AND TEES, LB.
SQ. IN. SIZE OF TAP OR SIDE OUTLET

Gal. per min.	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	3"
10	1.35	0.64	0.18	0.08			
20	5.38	2.54	0.77	0.31	0.14		
30	12.1	5.72	1.62	0.69	0.33	0.10	
40	21.5	10.2	3.07	1.23	0.58	0.18	
50	33.6	15.9	4.49	1.92	0.91	0.28	
60	48.4	22.9	6.46	2.76	1.31	0.40	
70	65.9	31.1	8.79	3.76	1.78	0.55	0.10
80	86.1	40.7	11.5	4.90	2.32	0.72	0.13
90		51.4	14.5	6.21	2.94	0.91	0.16
100		63.5	17.94	7.67	3.63	1.12	0.21
120		91.4	25.8	11.0	5.23	1.61	0.30
140			35.2	15.0	7.12	2.20	0.41
150			40.4	17.2	8.16	2.52	0.47
160			45.9	19.6	9.30	2.92	0.54
180			58.1	24.8	11.8	3.62	0.68
200			71.8	30.7	14.5	4.48	0.84
225				38.8	18.4	5.67	1.06
250				47.9	22.7	7.00	1.31
275				58.0	27.4	7.70	1.59
300				69.0	32.6	10.1	1.88

NOTES RELATING TO TABLES

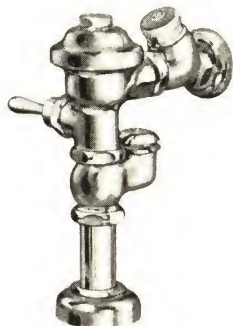
Quantities given in Table No. 1 on the preceding page will ordinarily prove adequate for the fixtures usually installed in connection with Sloan Flush Valves, but they do not provide for the large demands of special apparatus such as shower baths, laundry machinery and the like. Liberal increases should be made whenever such demands exist. On the other hand, it may be permissible occasionally to reduce the quantities somewhat, especially in those groups for which the larger demands are provided for.

Fittings cause a considerable amount of resistance. When it is necessary to work closely, the values given in Table 2 may be used. Usually the rougher method employed in the example worked above is satisfactory.

Water meters are somewhat of a problem owing to the great variation of resistance offered by them to the flow of water. It is always best, when possible, to get information from the maker of the meter which is to be used. Average of the "Low" and "High" values given in Table 6 is usually sufficiently accurate for rough estimates.

If a filter is used on direct supply, 5 lbs. should be entered in Column 7. Manufacturers of filters usually give this as the limit drop since channeling of the filter bed, with resulting unsatisfactory operation, occurs when the drop through the filter exceeds this amount.

PRINCIPAL TYPES OF SLOAN FLUSH VALVES



100

S-100 SERIES

The S-100 Series is for top spud bowls with straight stop ROYAL, STAR, CROWN or NAVAL Flush Valves. Furnished with or without Vacuum Breaker, as ordered.



110

S-110 SERIES

The S-110 Series is for top spud bowls with angle stop ROYAL, STAR, CROWN or NAVAL Flush Valves. The stop may be right or left hand, as desired, by reversing the valve. Furnished with or without Vacuum Breaker, as ordered.



120

S-120 SERIES

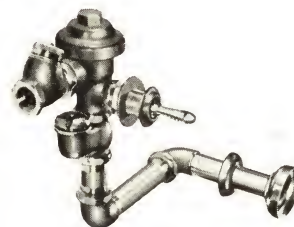
The S-120 Series is for back spud bowls with angle stop ROYAL, STAR, CROWN or NAVAL Flush Valves. Furnished with or without Vacuum Breaker, as ordered.



130

S-130 SERIES

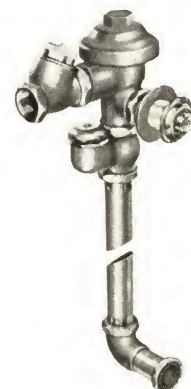
The S-130 Series is for side spud bowls with straight stop ROYAL, STAR, CROWN or NAVAL Flush Valves. Furnished with or without Vacuum Breaker, as ordered.



140

S-140 SERIES

The S-140 Series is for back or top spud bowls with concealed ROYAL, STAR, CROWN or NAVAL Flush Valves. Finished with or without Vacuum Breaker, as ordered.



152

S-150 SERIES

The S-150 Series is for prison type fixtures with concealed ROYAL, STAR, CROWN or NAVAL Flush Valves. Furnished with or without Vacuum Breaker, as ordered.

S-160 SERIES

The S-160 Series is for back or top spud bowls with seat-operated, exposed Flush Valves. See page on Seat-Operated Flush Valves.

S-170 SERIES

The S-170 Series is for back or top spud bowls with seat-operated, concealed Flush Valves.

S-180 SERIES

The S-180 Series is for all types of urinals with exposed, hand-operated ROYAL, STAR, CROWN or NAVAL Flush Valves.

S-190 SERIES

The S-190 Series is for all types of urinals with concealed, hand-operated Flush Valves.



185

S-200 SERIES

The S-200 Series is for all fixtures operated by SLOAN Floor Valves. See page on SLOAN Floor Valves.

S-300 SERIES

The S-300 Series is for all fixtures where a pedal-operated ROYAL Flush Valve is desired.



300

SLOAN VALVE COMPANY

MAIN OFFICE AND FACTORY, CHICAGO, ILL., U. S. A.

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